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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/780,269 | 02/17/2004 | Keith M. Grispo | L-F / 223 | 2232 |

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| EXAMINER | |
|---|---|
| PRASAD, SONAL | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3767 | |

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/780,269 | GRISPO, KEITH M. | |
| | Examiner | Art Unit | |
| | Sonal Prasad | 3767 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *17 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/18/05 & 1/23/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Objections*

1. Claims 5,10, & 22 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Battiato et al (US 5,868,710.) Battiato discloses an injector of the type having a motor which advances a plunger drive ram for use with a pre-filled syringe containing an approximate known amount of air, comprising: a processor which causes the motor to move; and, a memory storing a predetermined purge stop point representative of the approximate known amount of air in the pre-filled syringe, the injector configured to automatically advance the plunger drive ram an amount substantially equal to the predetermined purge stop point representative of the approximate known amount of air contained in the pre-filled syringe. (Claim 1)

Regarding claim 2, Battiato et al discloses the injector wherein the injector is further configured for use with an extension tubing also containing an approximate known amount of air; the memory storing a value representative of the approximate amount of air in the extension tubing, the injector configured to automatically advance the plunger drive ram an additional amount substantially equal to the approximate known amount of air contained in the extension tubing. (Col 6, lines 35-40)

Regarding claim 3, Battiato et al discloses the injector wherein the predetermined purge stop point is user adjusted. (Col 3, lines 30-35)

Regarding claim 4, Battiato et al discloses the injector wherein the calibrated predetermined purge stop point is calibrated. (Col 3, lines 30-35)

Regarding claim 6, Battiato et al discloses an injector of the type having a motor which advances a plunger drive ram for use with a user-filled syringe having a syringe plunger and containing an approximate known amount of air, the injector having a mechanical clearance between the plunger drive ram and the syringe plunger, the injector comprising: a processor which causes the motor to move; and, a memory storing a predetermined purge stop point representative of the approximate known amount of air added by aeration during filling in the user-filled syringe and the mechanical clearance between the plunger drive ram and the syringe plunger, the injector configured to automatically advance the plunger drive ram an amount substantially equal to the predetermined purge stop point representative of the approximate known amount of air

added by aeration during filling in the user-filled syringe and the mechanical clearance between the plunger drive ram and the syringe plunger. (Claims 1, 5, &6)

Regarding claim 7, Battiato et al discloses the injector wherein the injector is further configured for use with an extension tubing also containing an approximate known amount of air; the memory storing a value representative of the approximate amount of air in the extension tubing, the injector configured to automatically advance the plunger drive ram an additional amount substantially equal to the approximate known amount of air contained in the extension tubing. (Col 3, lines 30-35)

Regarding claim 8, Battiato et al discloses the injector wherein the predetermined purge stop point is user adjusted. (Col 3, lines 30-35)

Regarding claim 9, Battiato et al discloses the injector wherein the calibrated predetermined purge stop point is calibration. (Col 3, lines 30-35)

Regarding claim 11, Battiato et al discloses a dual head injector comprising a first head configured to receive a first syringe, a second head configured to receive a second syringe, and, Y-tubing coupling the first and second syringe, the dual head injector configured to automatically purge substantially all of the air from the first and second syringes and the Y tubing. (Col 3, lines 30-40)

Regarding claim 12, Battiato et al discloses the dual head injector & the Y-tubing including a first section coupled to the first head, wherein the first head first purges air from the first syringe and the first section of tubing. (Col 3, lines 30-40)

Regarding claim 13, Battiato et al discloses the dual head injector, the Y-tubing including a second section coupled to the second head, a connector coupled to the first

and second sections, and third section coupled to the connector, wherein the second head next purges air from the second syringe, the second section of tubing, the connector and the third section of tubing. (Fig. 11B)

Regarding claims 14-17, Battiato et al discloses the dual head injector, wherein the first syringe is a pre-filled syringe of contrast media, wherein the second syringe contains a saline solution, wherein one of the first and second syringes contains a contrast media, wherein one of the first and second syringes contains a saline solution. (Col 1, lines 20-35, Claim 1)

Regarding claim 18, Battiato et al discloses a method of automatically purging air from an injector comprising: determining a syringe size and type; and energizing a motor for the period necessary to move a ram to a predetermined purge stop point based on the syringe size and type. (Col 1, lines 63-65)

Regarding claims 19-23, Battiato et al discloses the method further comprising allowing a user to fill the syringe, the method further comprising performing said energizing step upon a user activating a purge button, the method wherein the predetermined purge stop point is based on actual values for amounts of air trapped in a particular pre-filled syringe and an extension tubing used therewith, and the method wherein the syringe size and type are entered from a user interface. (Col 3, lines 30-35)

Regarding claim 24, Battiato et al discloses the method wherein the syringe size and type are derived from a face plate to which the syringe is coupled. (Fig. 1, #28)

Regarding claim 25, Battiato et al discloses a method of automatically purging air from an injector comprising: monitoring an air detector proximate a syringe, energizing a motor to move a ram to advance a plunger of the syringe while monitoring the air detector proximate the discharge tip of the syringe, and stopping the ram when air is no longer detected. (Fig. 2, #40)

Regarding claims 26-29, Battiato et al discloses the method, further comprising allowing a user to fill the syringe, activating a purge button, wherein said ram is stopped after a predetermined amount of fluid has been purged while air is not detected, and wherein the air detector is proximate a discharge tip of said syringe. (Col 1, lines 20-35)
Regarding claim 30, Battiato et al discloses a method automatically purging air from a dual head injector comprising: determining first and second syringe sizes and types installed on said injector- energizing a motor of a first head for the period necessary to move a ram to a predetermined purge stop point based on the first syringe size and type; energizing a motor of a second head for the period necessary to move a ram to a predetermined purge stop point based on the second syringe size and type. (Claim 1)

Regarding claim 31-34, Battiato et al discloses the method further comprising allowing a user to fill the first syringe, second syringe, initiated upon a user activating a purge button on the first head, & initiated upon a user activating a purge button on the second head. (Col 1, lines 22-30).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonal Prasad whose telephone number is 571-272-3383. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sonal Prasad
Examiner
Art Unit 3767

Kevin C. Sirmons
3/20/06